# BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF HAWAII

In the Matter of the Application of)

HAWAIIAN ELECTRIC COMPANY, INC.

DOCKET NO. 05-0122

For Approval to Construct a Temporary and Permanent 46kV Overhead Subtransmission Line Pursuant to HRS Section 269-27.5 For Item Y00059--Kamehameha Highway) Kokololio Bridge Replacement Overhead Line Relocation.

DECISION AND ORDER NO. 22168

At 2:20 o'clock P .M.

Chief Clerk of the Commission

ATTEST: A True Copy KAREN HIGASHI

Chief Clerk, Public Utilities Compission State of Hawaii.

# BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF HAWAII

In the Matter of the Application of)

HAWAIIAN ELECTRIC COMPANY, INC.

For Approval to Construct a )
Temporary and Permanent 46kV )
Overhead Subtransmission Line )
Pursuant to HRS Section 269-27.5 )
For Item Y00059--Kamehameha Highway)
Kokololio Bridge Replacement )
Overhead Line Relocation. )

Docket No. 05-0122

Decision and Order No. 22168

#### DECISION AND ORDER

By this Decision and Order, the commission approves HAWAIIAN ELECTRIC COMPANY, INC.'s ("HECO's") proposal to construct temporary and permanent forty-six kilovolt ("46kV") subtransmission lines above the surface of the ground, pursuant to Hawaii Revised Statutes ("HRS") § 269-27.6(a) in connection with its Kamehameha Highway Kokololio Bridge Replacement Overhead Line Relocation project.

I.

#### Background

A.

#### The Application

1.

#### Procedural History

HECO is a Hawaii corporation, which was initially organized under the laws of the Kingdom of Hawaii on or about

October 13, 1891. HECO, a public utility as defined by HRS § 269-1, is engaged in the production, purchase, transmission, distribution, and sale of electricity on the island of Oahu in the State of Hawaii.

On May 23, 2005, HECO filed an application seeking commission approval to construct temporary and permanent overhead subtransmission lines in association 46kV with Project Y00059--Kamehameha Highway Kokololio Bridge Replacement Line Relocation project ("Application"), consists of: (1) Item P0001075--Kamehameha Highway Kokololio Bridge Replacement Temporary Overhead Line Relocation; and (2) Item P0001076--Kamehameha Highway Kokololio Replacement Permanent Overhead Line Relocation (collectively, "Proposed Project"). In its Application, HECO requests that the commission: (1) conduct a public hearing pursuant to HRS § 269-27.5 regarding its proposal to construct temporary and permanent 46kV overhead subtransmission lines through residential area; and (2) determine that HECO's proposed temporary and permanent 46kV lines being constructed above the surface of the ground is consistent with HRS § 269-27.6(a).

Copies of HECO's Application were served on the DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS, DIVISION OF CONSUMER ADVOCACY ("Consumer Advocate"), an *ex officio* party to this docket pursuant to HRS § 269-51 and Hawaii Administrative Rules § 6-61-62.

<sup>&</sup>lt;sup>1</sup>No persons moved to intervene or participate in this proceeding.

On July 6, 2005, the commission held a public hearing regarding HECO's proposed construction plans at Hauula Elementary School Cafeteria, 54-046 Kamehameha Highway, Hauula, Hawaii, 96717, in accordance with HRS § 269-27.5 ("Public Hearing").<sup>2</sup>

2.

### HECO's Proposed Project

The Proposed Project was initiated at the request of the State Department of Transportation ("DOT") to accommodate the DOT's plans to replace and widen the existing Kokololio Stream Bridge (the "Bridge") in Hauula, Oahu. To facilitate its Bridge replacement plans, the DOT intends to install a temporary bypass roadway and bridge around the existing Bridge in a temporary construction easement. The DOT requested that HECO relocate its existing 46kV, twelve kilovolt ("12kV"), and secondary overhead lines near the Bridge along its temporary easement to clear a one hundred (100) foot zone around the Bridge to facilitate DOT's construction project. Upon completion of the Bridge replacement, HECO intends to re-install permanent overhead lines along Kamehameha Highway in approximately the same alignment with the existing lines, and dismantle and remove the temporary overhead lines.

Work associated with the temporary overhead relocation portion of the Proposed Project includes:

<sup>&</sup>lt;sup>2</sup>Aside from HECO and the Consumer Advocate, no other organization or individual provided public testimony during the scheduled Public Hearing. The transcript of the Public Hearing was filed with the commission on July 27, 2005.

- (A) the installation of:
  - (1) six (6) sixty-five (65) foot wooden poles;
  - (2) one (1) forty-five (45) foot pole;
  - (3) eleven (11) anchors;
- (4) approximately 663 circuit feet of 3/0 AAAC 46kV, 336 KCM AAC 12kV, and secondary overhead conductors;
  - (5) one (1) 2'x4' handhole;
- (6) approximately sixty (60) feet of 1-3" duct; and
- (7) approximately 105 circuit feet of #2 aluminum triplex secondary underground cable; and
  - (B) the removal of:
    - (1) five (5) existing wooden poles;
    - (2) four (4) anchors; and
- (3) approximately 460 circuit feet of 1/0 copper 46kV, 4/0 copper 12kV, and secondary overhead conductors.

The permanent overhead relocation work for the Proposed Project consists of:

- (A) the installation of:
  - (1) one (1) new sixty-five (65) foot wooden pole;
  - (2) one (1) anchor; and
- (3) approximately 493 circuit feet of 1/0 copper 46kV, 4/0 copper 12kV, and secondary overhead conductors; and
  - (B) the removal of:
- (1) three (3) temporary sixty-five (65) foot wooden poles;
  - (2) nine (9) anchors; and

(3) approximately 663 circuit feet of 3/0 AAAC 46kV, 336.4 KCM AAC 12kV, and secondary overhead conductors.

In sum, the end result of HECO's Proposed Project will be a net effect of zero (0) poles added/removed. There will be a total of eight (8) new wooden poles installed, of which five (5) will be permanent replacements installed in different locations than the existing five (5) poles, and three (3) poles will be installed for a temporary period, which will be removed after completion of the permanent overhead construction.<sup>3</sup>

HECO represents that its Proposed Project satisfies the requirements of HRS § 269-27.6(a). Specifically, HECO contends that the benefits (if any) of placing the 46kV lines underground HECO states that do not outweigh the costs. it costs "approximately two times more to underground the line than to construct it overhead." Further, HECO represents that the visual impact due to the Proposed Project will be insignificant since: (1) an existing 46kV overhead circuit is already in the affected area; and (2) the portion of the 46kV line being temporarily relocated will only be moved one hundred (100) feet laterally from its existing location. Moreover, HECO represents that, to the best of its knowledge, there is no governmental agency or other party willing to pay for the additional costs associated with undergrounding the line.

<sup>&</sup>lt;sup>3</sup>Refer to pages 4-5 of the Application for a more detailed description of the work associated with the Proposed Project.

<sup>&</sup>lt;sup>4</sup>See Application at 6.

The current estimated capital costs (including changeover and removal costs) for the Proposed Project is \$506,581. This amount includes the DOT's in-kind and cash contributions totaling \$235,284. Cost sharing for the Proposed Project is said to be based on HRS § 264-33. Under this statute, capital improvement costs are shared fifty/fifty (50/50) between HECO and DOT. after first deducting \$10,000 to the account for depreciation, salvage, and betterment costs. HECO's schedule for the Proposed Project is contingent upon the DOT's construction schedule and will begin upon completion of the DOT's bypass road, which is anticipated to be finished on or about February 2006.<sup>5</sup>

в.

## Consumer Advocate's Position

On October 24, 2005, the Consumer Advocate filed its Statement of Position informing the commission that it does not object to approval of the Application ("Consumer Advocate's Statement of Position"). It is the Consumer Advocate's position that HECO's proposal to relocate the existing 46kV line to temporary and then permanent overhead facilities satisfies the requirements of HRS § 269-27.6(a).

According to the Consumer Advocate, the benefit of placing the electric transmission system underground does not

<sup>&</sup>lt;sup>5</sup>See Response to Informal CA-IR-7. HECO filed written responses to the Consumer Advocate's informal information on October 14, 2005. The Consumer Advocate's information requests were sent to HECO by electronic mail on October 7 and 11, 2005 ("Response").

outweigh the estimated cost differential of \$385,6916 to underground the 46kV line. The Consumer Advocate states that: (1) the visual impact of the proposed permanent facilities would intends be since HECO to restore the approximately the same location as the existing (2) the temporary overhead facilities will be routed along the temporary bypass road and will not obstruct the views of residents in the area; and (3) other utilities' facilities, e.g., cable television, are currently placed overhead, and relocation of only HECO's facilities will not substantially improve the visual impact of the area.

The Consumer Advocate also states that there governmental mandate requiring the underground placement no the 46kV lines associated with the Proposed Project. of The DOT, moreover, is unwilling to pay for the additional costs of placing the lines underground nor is the Consumer Advocate aware of any other party willing to do so. In addition, the Consumer Advocate contends that placing the line underground does not appear to be a feasible alternative since it would delay the DOT's replacement of the Bridge.

Overhead construction of the 46kV line is estimated to cost approximately \$506,581 while placing the line underground is expected to cost roughly \$892,272. In response to informal CA-IR-3, HECO acknowledged that its estimate to underground the 46kV line may be <u>understated</u> since it failed to account for the costs to trench under the Bridge. While HECO acknowledges this omission, it did not revise its cost estimate for the underground placement of the facilities. Although the Consumer Advocate would have preferred that HECO revise its estimate, it conducted its review based on the cost differential provided in the Application since requiring HECO to revise its analyses may have delayed timely approval of the Application thereby disrupting the DOT's construction schedule for the Bridge replacement.

Although not relevant to the Application, the Consumer Advocate notes that the DOT's contribution appears to be reasonable because it is based on HRS § 264-33's cost sharing requirements. The Consumer Advocate, however, reserves the right to review the final costs associated with the Proposed Project in HECO's rate proceeding following completion of the Proposed Project.

II.

#### Discussion

HRS § 269-27.6(a) titled "Construction of high-voltage electric transmission lines; overhead or underground construction" states:

Notwithstanding any law to the contrary, whenever a public utility applies to the public utilities commission for approval to place, construct, erect, or otherwise build a new forty-six kilovolt or greater high voltage electric transmission system, either above or below the surface of the ground, the public utilities commission shall determine whether transmission system electric shall be placed, constructed, erected, or built above or below the of the ground; provided that determination, the public utilities commission shall consider:

- (1) Whether a benefit exists that outweighs the costs of placing the electric transmission system underground;
- (2) Whether there is a governmental public policy requiring the electric transmission system to be placed, constructed, erected, or built underground, and the governmental agency establishing the policy commits funds for the additional costs of undergrounding;
- (3) Whether any governmental agency or other parties are willing to pay for the additional costs of undergrounding;

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- (4) The recommendation of the division of consumer advocacy of the department of commerce and consumer affairs, which shall be based on an evaluation of the factors set forth under this subsection; and
- (5) Any other relevant factors. HRS § 269-27.6(a).

First, under HRS § 269-27.6(a)(1), the commission finds that no benefit exists that outweighs the costs associated with constructing the lines underground. HECO initially estimated it would cost more than \$380,000 to place the line underground as opposed to placing it overhead, as proposed. Since there is an existing 46kV overhead circuit in the affected area, placing the 46kV temporary and permanent lines overhead as opposed to underground will not dramatically impact the area visually. Additionally, since HECO plans to remove the temporary 46kV line and relocate the permanent 46kV line in approximately the same location after the DOT's Bridge replacement is complete, the impact of the proposed permanent line will be negligible. Moreover, the commission agrees with the Consumer Advocate's contention that unless all known overhead facilities in the area are placed underground (such as, in this case, cable TV facilities); "only placing the 46kV Line underground would not

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<sup>&</sup>lt;sup>7</sup>HECO initially estimated that it would cost approximately \$506,581 to place the line overhead and roughly \$892,272 to place it underground. However, as noted above, in response to informal CA-IR-3, HECO contends that its early estimate for placing the 46kV line underground may be understated since it was based on "standard" open trench construction to install the ductline for its facilities beneath the Kokololio Stream, and that a horizontal directional drilling method may be required.

yield a pristine view plane." No public comments were given at the Public Hearing regarding the benefits of placing the lines underground. Accordingly, there does not appear to be a benefit that outweighs the additional costs of placing the 46kV lines of the Proposed Project underground.

Second, under HRS § 269-27.6(a)(2), the commission is not aware of any governmental policies requiring the underground placement of the temporary and permanent lines. As noted by the Consumer Advocate, there have been State legislative efforts to study the feasibility of requiring underground placement of utility facilities, but none of the recommendations have resulted in a legislative mandate to underground electric transmission lines.

Third, under HRS § 269-27.6(a)(3), the commission is not aware of any governmental agency or any other party willing to pay for the additional costs of placing the lines underground. In a letter dated May 17, 2005, the DOT expressly informed HECO that it does not have the funds to underground the electrical lines associated with the Proposed Project.

Fourth, under HRS § 269-27.6(a)(4), the commission recognizes that the Consumer Advocate, after reviewing the Proposed Project under HRS § 269-27.6(a), stated that it

<sup>\*</sup>See Consumer Advocate's Statement of Position at 6-7.

<sup>&</sup>lt;sup>9</sup>HECO submitted DOT's letter dated May 17, 2005, into the record of this proceeding on October 6, 2005.

"does not object to the relocation of the 46kV [1]ine to the proposed temporary and permanent overhead facilities." 10

Finally, under HRS § 269-27.6(a)(5), the commission notes that the underground alternative does not appear feasible as it would delay the DOT's construction of the Bridge. According to HECO, "the underground lines would need to be installed prior to the State DOT bridge work, which would seriously impact DOT's construction schedule." 11

Based on the foregoing, the commission concludes that the overhead construction of the temporary and permanent lines in association with the Proposed Project, in the manner set forth in the Application, should be approved.

III.

#### Orders

#### THE COMMISSION ORDERS:

- 1. The overhead construction of temporary and permanent 46kV overhead lines in association with the Proposed Project, in the manner set forth in the Application, is approved, pursuant to HRS § 269-27.6(a).
- 2. This docket is closed, unless ordered otherwise by the commission.

<sup>&</sup>lt;sup>10</sup>See Consumer Advocate's Statement of Position at 9.

<sup>&</sup>lt;sup>11</sup>See Application at Exhibit V, page 1.

DONE at Honolulu, Hawaii \_\_\_\_\_\_\_DEC - 7 2005 \_\_\_\_.

PUBLIC UTILITIES COMMISSION OF THE STATE OF HAWAII

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Carlito P. Caliboso, Chalirman

By (Excused)
Wayne H. Kimura, Commissioner

Janet E. Kawelo, Commissioner

APPROVED AS TO FORM:

Ji/Sook Kim

Commission Counsel

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#### CERTIFICATE OF SERVICE

I hereby certify that I have this date served a copy of the foregoing <u>Decision and Order No. 22168</u> upon the following parties, by causing a copy hereof to be mailed, postage prepaid, and properly addressed to each such party.

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DATED: DEC - 7 2005